

In the Specification

Applicants present replacement paragraphs and/or lines with insertions indicated by underlining and deletions indicated by strikethroughs or double bracketing. Insertions in text that is already underlined in the filed specification are indicated by double underlining.

Please add the following new paragraph after the Title and immediately before the paragraph beginning on page 1, line 5:

FEDERALLY SPONSORED RESEARCH

This invention was made in part with Government support under NIH Grant No. R03 AR46356. Accordingly, the Government may have certain rights in this invention.

Please amend the three paragraphs beginning on page 7, line 31 as follows:

Fig. 29: ~~is a photomicrographs of the collagen gel with human ACL cells. d~~

~~Fig. 30: is a photomicrograph of the FGF-2 gel at 1 mm from the explanted ACL tissue~~

~~Fig. 31: is a histogram demonstrating the effect of "growth factor cocktail" (GFC) concentration on retention of DNA in the ACL cell seeded gels after three weeks in culture.~~

Please amend the paragraph beginning on page 92, line 14 as follows:

The number of cells in the gel increased with time in culture. By 9 days of culture, the gel constructs had a histologic appearance similar to that of the intact human ACL in terms of cell density and alignment (Figure ~~29~~21). The acid-soluble collagen hydrogel with FGF-2 is conducive to human ACL cell growth and proliferation.

Please amend the paragraph beginning on page 92, line 28 as follows:

The histologic analysis demonstrated increasing numbers of cells in both the cell gel and the cell free gel (Figure ~~30~~27). The increase in the cell-seeded gel may have been due to the proliferation of the seeded cells, or to the migration of cells from the tissue into the gel. The initial increase in the cell-free gel was from migration of cells from the ligament tissue. By day 21, the cell density in the two groups was similar. ACL cells will migrate from the tissue into an

adjacent collagen gel with containing FGF-2, resulting in similar cell number densities to a cell-seeded gel by three weeks of culture.

Please amend the paragraph beginning on page 93, line 22 as follows:

The gel with 15% GFC added had the greatest retention of cells at three weeks (one factor ANOVA, $p = 0.05$; Fisher's PLSD with significant differences between groups 1 and 2; Figure 3129), suggesting this percentage of GFC is optimal for cell retention and support in the gel. Rates of collagen synthesis were also highest in this group at 2 and 3 weeks of culture. The addition of 15% by volume of the "growth factor cocktail" significantly increased the DNA retention in the gel and also resulted in increased rates of collagen synthesis in the gel.